**WHAT IS CLAIMED IS:**

1. A method for measuring a speed of a moving body using an accelerometer, comprising the steps of:

setting a standard for regulating one or more windows, each of which window is a range of time for obtaining a movement average for a movement measurement value at a point of time from a plurality of movement measurement values measured by the accelerometer and a plurality of weight values for each of the measurement values included in the windows;

storing the measurements measured by the accelerometer;

determining whether the moving body has stopped at a point of time when the speed of the moving body is to be measured;

detecting an irregular constant of the accelerometer and a gravitational acceleration component at a stopped condition when the moving body has been determined to be in a stopped condition;

regulating the windows and the weight values based on a predetermined standard for regulating the windows and the weight values when the moving body has not been determined to be in a stopped condition;

detecting the irregular constant of the accelerometer for measuring the gravitational acceleration component and the gravitational acceleration component at the point of time, based on information in the windows and the weight values regulated during the regulating step; and

calculating an actual acceleration value at a pertinent point of time by subtracting the irregular constant and the gravitational acceleration component from the acceleration measurement at the point of time and calculating the speed of the moving body based on the actual acceleration value.

2. The method according to claim 1, wherein the setting step comprises the step of storing measurements from a two-axis accelerometer.

3. The method according to claim 1, wherein the regulating step further comprises the step of after setting a reference parameter, regulating the windows and the weight values using both the reference parameter and the standard for regulating the windows and the weight

values.

4. The method according to claim 3, wherein the regulating step further comprises the step of setting the reference parameter as a magnitude of a difference between a value obtained by removing an x-axis movement average from an x-axis measurement from the two-axis accelerometer and another value obtained by removing a y-axis movement average from a y-axis measurement from the two-axis accelerometer.

5. The method according to claim 3, wherein the regulating step further comprises the step of setting an inversely proportional relationship between a magnitude of the reference parameter and a magnitude of the window.

6. The method according to claim 3, wherein the regulating step further comprises the step of assigning the larger weight value to the measurement, out of the measurements included in the window, nearer to the point of time within a determined range when the magnitude of the reference parameter is equal to or larger than a predetermined value.

7. The method according to claim 1, wherein the detecting based on the windows step further comprises the step of calculating a movement average at the pertinent point of time based on the information in the windows and the weight values set during the regulating step and detecting the irregular constant and the gravitational acceleration component using the movement average as a low-pass filter.

8. An apparatus for measuring the speed of a moving body using an accelerometer, the apparatus comprising:

an acceleration-measuring unit for measuring the current acceleration of a moving body using an accelerometer mounted on the moving body;

an acceleration-storing unit for storing information on the acceleration measured by the acceleration-measuring unit according to the measurement time;

a gravitational acceleration-compensating unit for calculating a movement average of an acceleration at a point of time when an actual acceleration is to be obtained using the

acceleration measurements stored in the acceleration-storing unit, wherein a weight value is assigned to each of the measurements from the accelerometer included in a window, which is a range of time from the point of time when the actual acceleration is to be obtained; the weight value being used to calculate the movement average; and the earth's gravitational acceleration component is compensated for the acceleration measurement at the pertinent point of time based on the movement average; and

a speed-calculating unit for calculating the speed of the moving body using the information on the actual acceleration after compensation of the earth's gravitational acceleration by the gravitational acceleration-compensating unit.

9. The apparatus according to claim 8, wherein the gravitational acceleration-compensating unit sets a reference parameter and regulates the windows and the weight values based on the reference parameter.

10. The apparatus according to claim 9, wherein the gravitational acceleration-compensating unit sets as the reference parameter a magnitude of a difference between a value obtained by removing an x-axis movement average from an x-axis measurement from the two-axis accelerometer and another value obtained by removing a y-axis movement average from a y-axis measurement from the two-axis accelerometer.

11. The apparatus according to claim 9, wherein the gravitational acceleration-compensating unit sets an inversely proportional relationship between a magnitude of the reference parameter and a magnitude of the window.

12. The apparatus according to claim 9, wherein the gravitational acceleration-compensating unit assigns the larger weight value to the measurement, out of the measurements included in the window, nearer to the point of time within a determined range when the magnitude of the reference parameter is equal to or larger than a predetermined value.

13. The apparatus according to claim 8, wherein the gravitational acceleration-compensating unit detects the irregular constant for detecting the gravitational acceleration

component, as well as the gravitational acceleration component at the pertinent point of time, using the movement average value as a low-pass filter and subtracts the irregular constant and the gravitational acceleration component from the measurement measured at the point of time, in order to compensate for the earth's gravitational acceleration.

14. The apparatus according to claim 13, wherein if the moving body is in a stopped condition at a point of time when the speed of the moving body is to be measured, the gravitational acceleration-compensating unit detects the irregular constant and the gravitational acceleration component at the point of time.